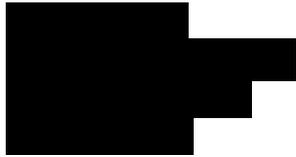


*I request that my personal details be withheld from publication.*

From:



To: The Education and Innovation Committee

Subject: Inquiry into Assessment Methods for Senior Maths, Chemistry and Physics

Date: 11 May 2013

---

### **Ensuring assessment processes are supported by teachers**

As a teacher of Chemistry, Maths A and Maths B with over 30 years of experience, I do not support the current QSA assessment processes for reasons including the following:

1. The amount of time devoted to EEIs in Chemistry has reduced the breadth of the curriculum.
2. The workload of students completing EEIs is excessive, especially when they study two or three senior sciences.
3. The current syllabuses in Maths A and B and Chemistry have increased enormously the time required by teachers to grade assessment tasks and profile results with no apparent improvement in students' overall knowledge, understanding or ability to apply that knowledge. As a result of this increase, the time available for preparation of resources and the development of teaching strategies has decreased.

### **Student participation levels**

The number of girls in my Chemistry classes is about 50% greater than the number of boys. In my opinion the reasons why this has occurred include the following:

1. In general, the increase in extended writing requirements of the current syllabus favours girls over boys.
2. It is very difficult to write criteria to meet QSA requirements and make their meaning accessible, unambiguous and useful to students. While criteria are intended to assist students to determine the standards required, often they are useful only if teachers spend considerable time interpreting them for students. Many boys respond more positively when goals are clearly defined.

## **The ability of assessment processes to support valid and reliable judgments of student outcomes**

I believe that the current QSA assessment processes do not support valid and reliable judgments of student outcomes for reasons including those listed below:

1. In Chemistry, the use of standards to assess student work has resulted in assessing the quality of student knowledge in selected topics but not the quantity of their knowledge.
2. Many criteria contain vague qualifiers which different teachers interpret differently, and often the time available to moderate is very limited due to exam schedules and reporting timelines.
3. Assessing a single question on a Maths B paper can require as many as 10 sub-criteria to be considered. Even for multi-step questions, it is almost impossible to clearly subdivide a student's response and underlying thinking into so many parts, and then guarantee that another teacher would interpret and classify the response in the same way.
4. Combining a student's results from all assessment tasks to produce an overall Level of Achievement is subjective. There is no specific indication in the syllabus of how many times a student must produce an A standard response to warrant an overall A standard Level of Achievement (i.e. a VHA) when they exit the subject. Different schools have different interpretations of what constitutes having demonstrated an overall A standard. This is also true for the awarding of other standards.
5. Huge variation occurs between schools as no two schools have exactly the same course (curriculum, topics studied or assessment tasks) and a very limited amount of time is available for District Review Panel members to review submissions. The feedback from the Review Panel from year to year can be inconsistent, with assessment tasks that were satisfactory last year no longer being seen as satisfactory this year, under the same syllabus.